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EXAMINER

SOOHOO, TONY GLEN

ART UNIT	PAPER NUMBER
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1723

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/763,282	Applicant(s) HEEG ET AL.	
	Examiner Tony G. Soohoo	Art Unit 1723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-13, 15, 18-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is structurally incomplete in the recitation of "a shaking incubator". The claimed structure does not positively claim any structural element to provide incubation or a temperature control. Thus the term "shaking *incubator*" is a misnomer and whereas the claims only require a positive limitation of a shaker and does not positively claim any incubator control or heating/cooling sensor element. Thus the recitation of an incubator is deemed and considered as providing little structural distinction to the claimed invention whereby such supportive structure to function to incubate has not been positively claimed in the combination of elements defined as the claimed invention. Only a functional recitation of the device of being disposable inside a *workspace* which may provide a function of incubation has been positively recited.

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Claim 1 recites that the specimen storage device "is disposed within an incubator workspace". The claim does not positively claim an incubator workspace thereby it appears that an interpretation may be read that the phrase is merely directed to the intended use and thereby does not import the requirement of an incubator, but merely the capability to be disposed within an incubator. Clarification is needed. Does the claim require an incubator workspace or does the claim merely require that the specimen storage device may be capable to be placed in an incubator?

Claim 1 recites the specimen storage space comprises a base unit, however fails to provide any connective structure to the other elements of the "specimen storage position" and the "shaking platform" which are part of the "specimen storage spaces". Thereby appears to be incomplete in presenting a single unified apparatus which applicant regards as the invention. Clarification is needed in the structural cooperation between elements.

Claim 1 recites "specimen storage spaces". The claim appears to attempt to claim the "space" and not the actual structure which provides the spaces or provides a boundary to each distinct storage space of the plural space. Thus, it is unclear that merely the existence of a "void" or opening may be deemed as fully satisfying the claimed structure? It is also unclear if a "space" may be deemed as a positive structural element. This is in contrast to "walls" or a "housing", "slots", "bins", "cubbies", "shelves", for example, which defines a "space". In this example one may be clearly see and identify as the positive structure which applicant regards as the invention. The meets and bounds of what is structurally defined by a "spaces" is unclear.

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Claim 1 appears to attempt to state that "specimen storage spaces comprise:" of 1) a position, 2) a shaking platform element, and 3) a base element. It is unclear how "space" may comprise of actual physical elements such as a platform or base, since the physical element mass would take up the defined "space". For example, it would be a misnomer to say that the luggage storage space of a car comprises a location, a set of golf clubs, and a duffle bag. This requires clarification to this phrase.

Claim 1 recites "an individually controllable" shaking platform which is unclear if the claim requires a positive recitation of a an individual controller, or is merely stating that the platform may provide a function to be individually controlled. It is noted that the claim does not positively point out and distinctly claim a "controller" or "an individual controller" connected to the shaking platform. The meets and bounds of the shaking platform functional operation or positive controller element is unclear in what is structurally required to meet the limitation.

The claim is under clear in what structurally defined by a "specimen storage position", since a position is understood as a "location". It is also unclear in the language of the claim as to where the "specimen storage position.

Claims 2 recites "the base unit of the at least one shaking unit" however fails to provide proper antecedent basis that the base unit is "of the at least one shaking unit".

Claims 2 and 3 fails to provide antecedent basis for "the at least one shaking unit". The claim only points out a shaking platform.

Claims 15 and 18-20 fails to provide antecedent basis for "the shaking unit".

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 14-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Friedman 6659637.

In the interpretation of claim 14-18, the following elements of Friedman as applied to claims 14-20 is read as having a shaking unit comprising a base 10 feet (see feet and housing below 11 in figure 3), a shaking platform 42 coupled for vibration with respect to the base via the coil and core assembly 40, 41, 12a, and 12b, and a spacer 20 disposed above and coupled to the shaking platform 42, a clamping element 30 disposed above and coupled to the spacer 20 via screws 31, and a specimen storage unit with specimen 50, 50 removably coupled to the clamping element 30 via the mechanism 63, 63, 62, 64.

With regards to claim 15 note that the base 10 feet may operate to be permanently affixed to the specimen storage devices holding 50, 50 if the assembly 60 is never removed.

With regards to claim 16 it is note that the shaking platform 42 may be detached by disconnecting the elements 12a, 12b, and dismantling it form the coil and core assembly 40, 41.

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With regards to claim 17, the phrase is narrative in the configuration, thereby note that the spacer provides an area above win which to permit the manipulation of the storage unit .

With regards to claims 18 and 19, note the controller unit 55, it is noted that it is inherent that wires must are present to connect the controller with the core to provide current to provide shaking. It is noted that wires lines may operate to be physically cut and resoldered together thereby provides the function of a "detachable" function of the wire lines.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 18-20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Friedman 6659637.

With regards to claims 18 and 19, note the controller unit 55, it is noted that it is inherent that wires must are present to connect the controller with the core to provide current to provide shaking. It is noted that wires lines may operate to be physically cut and resoldered together thereby provides the function of a "detachable" function of the wire lines. Nonetheless, otherwise, the use of wires to connect a controller and to

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provide a quick disconnection means between the wires and terminal posts are all old and well known techniques in electrical controls so as to provide an method of construction in the connection of two electrical components together, thus, it is deemed that it would have been obvious to one of ordinary skill in the art to provide for the Friedman device with wires and detachable lines so that the coil may be more effectively connected to one another in a more economical sense for ease of construction or repair.

With regards to claim 20, the Friedman reference discloses all of the recited subject matter as defined within the scope of the claims with the exception of plural shaking units coupled together by a distributor unit. It is old and well known to provide plural devices together to provide a multiple effect. Accordingly, it is deemed that it would have been obvious to one of ordinary skill in the art to provide plural shaking units of the single unit shown by Friedman with additional shaking units which are controlled by the controller 55 of Friedman so as to provide the added advantage the shaking of more samples 50 in a single apparatus. It has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

8. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malterer et al US 2003/0215357 in view of Friedman 6659637.

The Malterer (et al) reference discloses a specimen storage device (100, SSD) which is fully capable of being disposed in a temperature controlled room thereby

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deemed as being disposed within an incubator workspace (workspace room) with plural superimposed **storage space positions** (SSP) defined between by the drawer guides 106 and frame 101, wherein each of the **specimen storage spaces** (SSS) each may contain a respective shaking unit (SU) module which may be placed upon a detachable holder (DH) for the specimen storage device (SSD) formed at a specimen storage space (SSS).

[0087] *Instrumentation shelf modules (200A) and (200B) are designed to support, control, and transfer objects to and from benchtop laboratory instruments mounted as onboard mechanisms of the shelf module. Such laboratory instruments could include, but are not limited to, plate sealers, barcode labeler/applicators, plate seal piercers, liquid handling pipetters, liquid dispensers, plate washers, plate readers, shakers, centrifuges, heaters, dryers, bead stirrers, bead washers, illumination devices, barcode readers, plate carousels, or other similar instruments. The onboard instrument (209) in FIG. 10A is depicted as a traditional laboratory plate reader. That of FIG. 10B is depicted as four traditional thermal cyclers. As the thermal cyclers in FIG. 10B are significantly smaller than the laboratory plate reader of FIG. 10A, multiple of these instruments have been included in instrumentation shelf module (200B). Emphasis added in italics*

See paragraph [0087], line 8, which is held and supported with base clamps 210, and base shelf plate 201 for each respective shaker unit module [0080] and [0089]. This provides a detachable holder (DH) formed at a specimen storage space in such a manner such that the shaking unit (SU) may be removed from the specimen storage device (SSD). Note that each specimen storage space (SSD) may be defined a specimen storage position (SSP) within the space. It is also noted that the environment of the storage device may be controlled by an environmental control element 130, paragraph [0053, 0056] for controlling the environment in which the self module(s) operate which may be considered as a incubator and incubator workspace. Also an automated transport system is provide to operation for transport of the specimen, see

element 120.

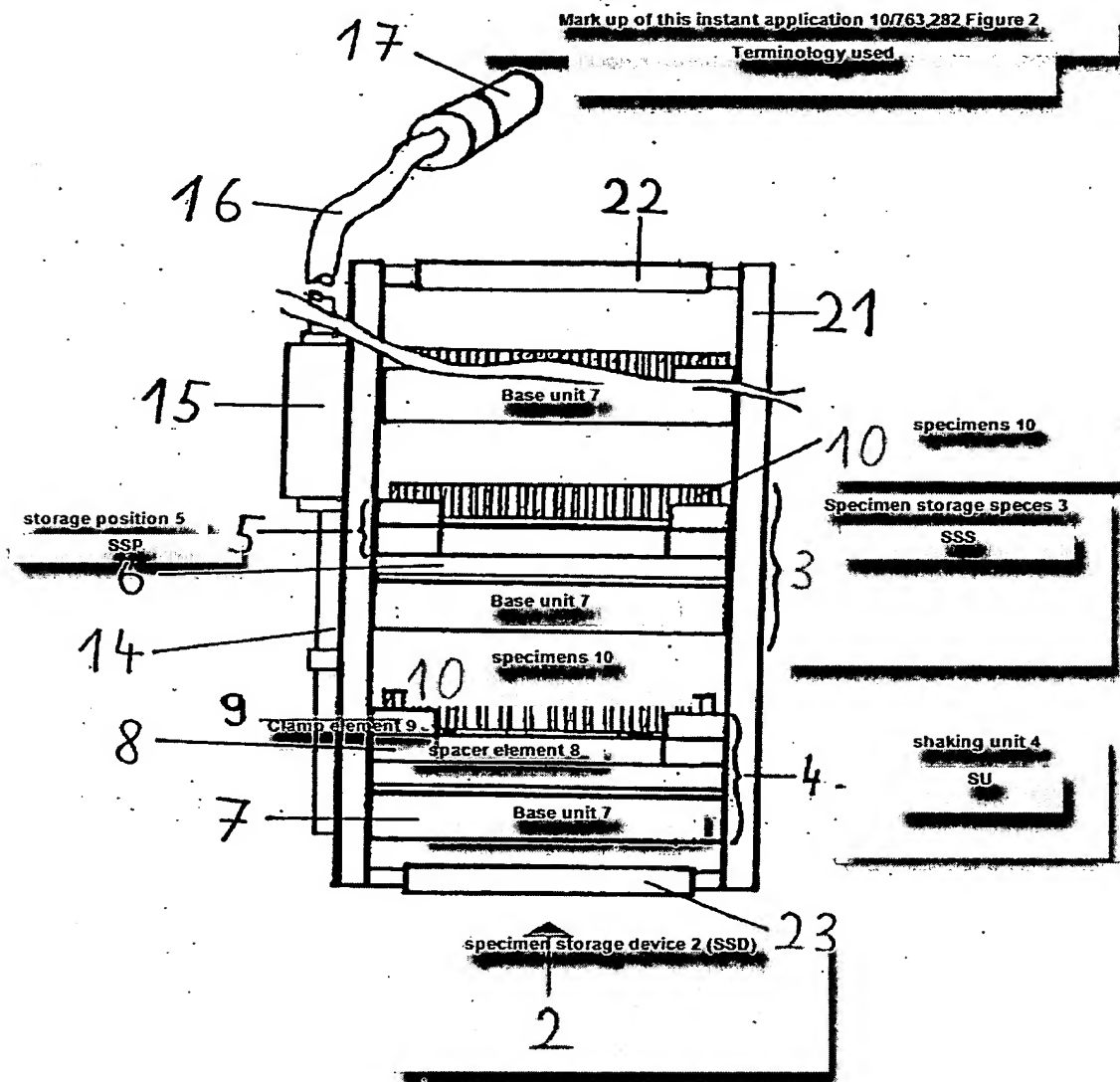


Fig. 2

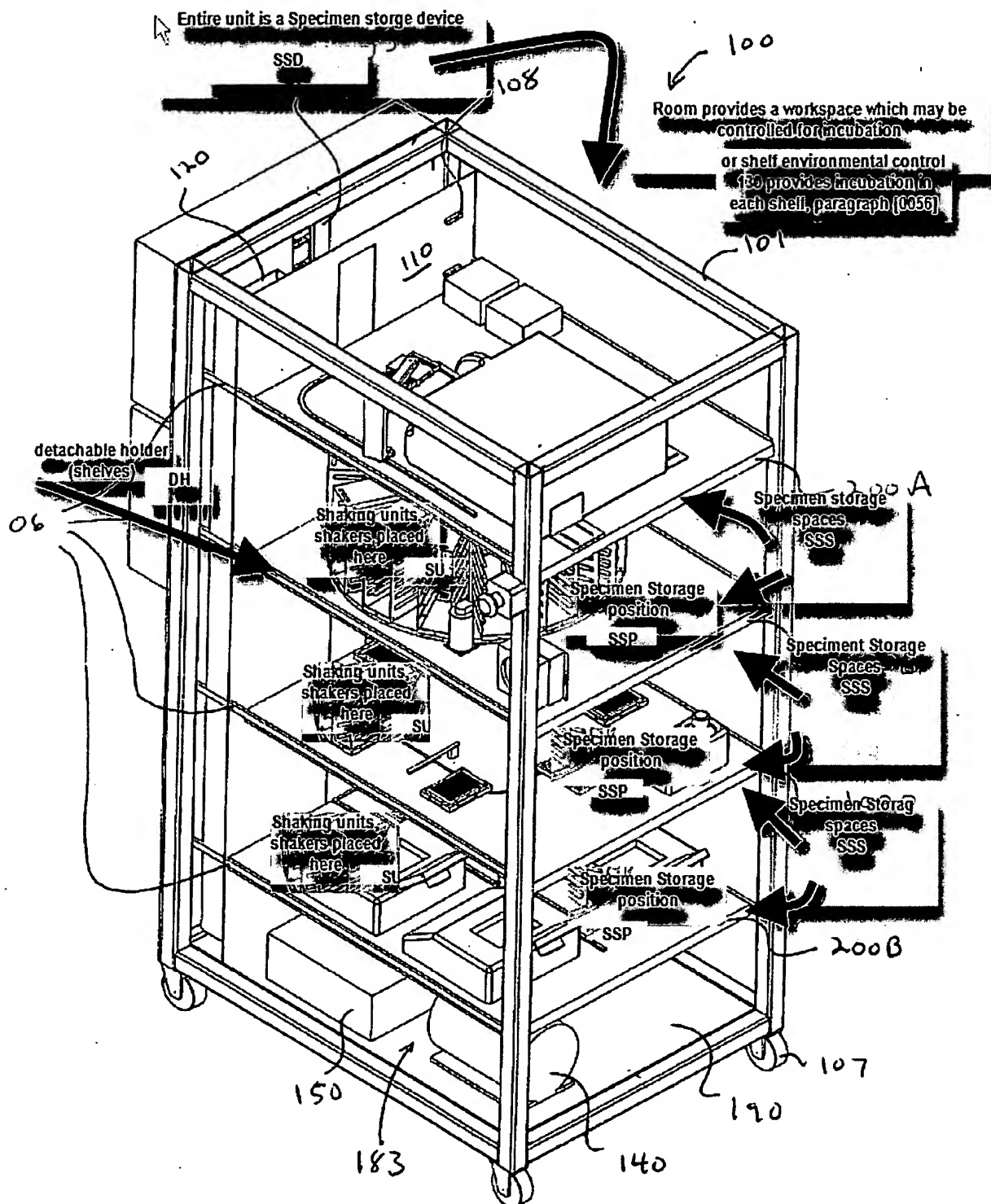


FIG. 4

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Malterer et al discloses all of the recited subject matter as defined within the scope of the claims with the exception of particulars of the specimen storage spaces defined between the spaces between drawer guides (SSS) comprising the elements of

1) a horizontally disposed shaking platform which may be individually controlled.

And 2) a base unit.

The Friedman reference discloses a detail to a shaking unit comprising a base 10 feet (see feet and housing below 11 in figure 3), a shaking platform 42 coupled for vibration with respect to the base via the coil and core assembly 40, 41, 12a, and 12b, and a spacer 20 disposed above and coupled to the shaking platform 42, a clamping element 30 disposed above and coupled to the spacer 20 via screws 31, and a specimen storage unit with specimen 50, 50 removably coupled to the clamping element 30 via the mechanism 63, 63, 62, 64. Note that the base 10 feet may operate to be permanently affixed to the specimen storage devices holding 50, 50 if the assembly 60 is never removed. Also the shaking platform 42 may be detached by disconnecting the elements 12a, 12b, and dismantling it from the coil and core assembly 40, 41. to claim 17, the phrase is narrative in the configuration, thereby note that the spacer provides an area above win which to permit the manipulation of the storage unit. With regards to the controller unit 55, it is noted that it is inherent that wires must are present to connect the controller with the core to provide current to provide shaking. It is noted that wires lines may operate to be physically cut and resoldered together thereby provides the function of a "detachable" function of the wire lines.

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In view of the teaching of Friedman n that a shaking unit may include having a base unit, shaking platform, spacer element, and 11, 12, it is deemed that it would have been obvious to one of ordinary skill in the art to provide the one shaker unit of the Friedman device into each of the storage space position shelves of Malterer (et al) so that plural shakers may be operated inside the storage device of the Malterer (et al) reference so as to provide a multiple effect of shaking more samples at the same time.

With regards to the permanence (claims 2) or detachable feature (claim 3), note that the device, when operated, is permanent when connected together for operational use, and may be detachable when the device is taken apart for repairs.

With regards to claim 4, the claim is directed to the subcombination of the storage/shaking device and not to the particulars to the automated transport. Evidence is the phrase "is designed for a specimen to be supplied by means of an automated transport system" but does not positively claim the element of an automated transport system. The structure is fully satisfies the capability to be supplied and removed by an appropriate automated robot specifically designed for the removal and supply of the specimen chamber.

With regards to claims 7-11, and 13, note that the device has a control unit would inherently have commonly known use of wires which may be operatively connected via commonly known wire connectors to provide cooperation with the controller for operation of the device.

With regards to claim 12, the positioning of the shaking unit is directed to a claimed recitation to a functional operation of the structure and does not provide a

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positive recitation of structural limitation to the previously claimed element and only require the ability to operate in such a manner. The provision of the controller and shaker unit with platform may be capable of fully operating to a zero position if the controller is programmed to do so.

Response to Arguments

9. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection and re-interpretation of the reference elements as detailed above in the rejection.


Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony G. Soohoo whose telephone number is (571) 272 1147. The examiner can normally be reached on 8AM-5PM, Tue-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Tony G Soohoo
Primary Examiner
Art Unit 1723